IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

ANSYS, INC.,

Plaintiff,

V.

CIVIL ACTION NO.

SF MOTORS, INC., d/b/a SERES, INC., ZHENGPING ZHANG, JAMES TAYLOR and DOES 1 THROUGH 10.

Defendants.

COMPLAINT AND DEMAND FOR TRIAL BY JURY

Plaintiff, ANSYS, Inc. ("Plaintiff"), brings this action against Defendants, SF Motors, Inc. d/b/a SERES, Inc. ("SERES"), Zhengping Zhang ("Mr. Zhang"), James Taylor ("Mr. Taylor") and Does 1 through 10 (collectively "Defendants"), for copyright infringement in violation of 17 U.S.C. § 101 et seq. By this Complaint, Plaintiff seeks, inter alia, injunctive relief, monetary damages, and attorney's fees under 17 U.S.C. §§ 106, 501, 502, 504 and 505, and alleges as follows:

THE PARTIES

- Plaintiff is a corporation with a principal place of business located at Southpointe,
 2600 ANSYS Drive, Canonsburg, PA 15317.
- 2. Plaintiff is the owner of copyright registrations for its ANSYS Mechanical and ANSYS Fluent modular suite of software programs.
 - 3. SERES is located at 3303 Scott Boulevard, Santa Clara, CA 95054. Corporate

filings with the California Secretary of State identify SERES as a Delaware Corporation with a corporate address of 3303 Scott Boulevard, Santa Clara, CA 95054.

- 4. SERES owns several valid licenses for ANSYS software products from 2018 through 2019. Thus, SERES has had a need for, utilized and has knowledge of the value of the ANSYS software products.
- 5. According to corporate filings with the California Secretary of State, Mr. Zhang is the Chief Executive Officer of SERES, and has a business address of 3303 Scott Boulevard, Santa Clara, CA. 95054. As Chief Executive Officer of SERES, Mr. Zhang is a principal, guiding spirit, central figure, and the moving, active, conscious force behind SERES's copyright infringement, and has control over the day to day operations thereof, and directly benefits from the tortious conduct alleged herein.
- 6. According to the SERES website, Mr. Taylor is the Chief Executive Officer of the SERES Automotive unit, a unit that focuses on vehicle development, manufacturing and partnerships in North America, with the same business address as Mr. Zhang.
- 7. Plaintiff is unaware of the true names and capacities of DOES 1 through 10, inclusive, and therefore sues said defendants by such fictitious names. Plaintiff will ask leave of Court to amend this Complaint to state the true names and capacities of the defendants sued as DOES when the same are ascertained. Plaintiff is informed and believes, and based thereon alleges that each of the fictitiously named defendants are responsible in some manner for the occurrences herein alleged, and that Plaintiff's damages, as herein alleged, were proximately caused by their conduct.
- 8. Plaintiff is informed and believes, and on that basis alleges, that at all times relevant to this action, each of the Defendants were the agent, affiliate, officer, director, manager,

principal, alter-ego, and/or employee of the remaining Defendants and were at all times acting within the scope of such agency, affiliation, alter-ego, relationship and/or employment, and actively participated in or subsequently ratified and adopted, or both, each and all of the acts or conduct alleged herein with full knowledge of each and every violation of Plaintiff's rights and the damages to Plaintiff proximately caused thereby.

JURISDICTION AND VENUE

- 9. This is a civil action seeking damages and injunctive relief for copyright infringement under the Copyright Act of the United States, 17 U.S.C. § 101 et seq.
- 10. This Court has original and exclusive jurisdiction over the subject matter of this Complaint pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 11. Plaintiff is informed and believes that this Court may properly exercise personal jurisdiction over the Defendants because, under the terms of the ANSYS Software License Agreement ("SLA"), the parties have agreed that all rights and use of the ANSYS Software are governed by and construed in accordance with the laws of the state of the Commonwealth of Pennsylvania, and the sole and exclusive jurisdiction and venue for any litigation arising from or relating to the SLA and the ANSYS Software shall be in a state or federal court maintaining jurisdiction over Washington County, Pennsylvania. Under the terms of the SLA, Defendants have submitted to personal jurisdiction in the United States District Court for the Western District of Pennsylvania.
- 12. Venue is proper in this District under 28 U.S.C. §§ 1391(b) and (c), and/or § 1400(a).

THE ASSERTED COPYRIGHTS

- U.S. Copyright Registration No. TX 8-268-167, registered on November 17,2016, and titled ANSYS Fluent Release 13 is owned by Plaintiff.
- 14. U.S. Copyright Registration No. TX 8-268-160, registered on November 17,2016, and titled Mechanical APDL Release 13 is owned by Plaintiff.
- 15. U.S. Copyright Registration No. TX 8-714-692, registered on April 29, 2019, and titled ANSYS 14.5 is owned by the Plaintiff.
- 16. U.S. Copyright Registration No. TX 8-780-315, registered on August 19, 2019, and titled ANSYS 15.0 is owned by the Plaintiff.

BACKGROUND FACTS

- 17. Plaintiff is a global leader in engineering simulation software. With its portfolio of engineering simulation software, Plaintiff helps it customers solve complex design challenges and engineer products. Plaintiff provides services in a wide range of industries, including the Aerospace and Defense, Automotive, Construction, Consumer Goods and Energy industries.
- 18. Two of Plaintiff's flagship products are the ANSYS Mechanical and ANSYS Fluent modular suite of software programs (hereinafter the "ANSYS Software").
- 19. ANSYS Mechanical is a mechanical engineering software solution that uses finite element analysis ("FEA") for structural analysis, using the ANSYS Mechanical interface. It covers an enormous range of applications and comes complete with everything from geometry preparation to optimization. ANSYS Mechanical can model advanced materials, complex environmental loadings and industry-specific requirements in areas such as offshore hydrodynamics and layered composite materials.

- 20. ANYS Fluent software contains broad, physical modeling capabilities needed to model flow, turbulence, heat transfer and reactions for industrial applications. Fluent spans an expansive range, including special models, with capabilities to model in-cylinder combustion, aero-acoustics, turbomachinery and multiphase systems.
- 21. ANSYS regularly improves, updates and adds features when it releases new versions of its ANSYS Software.
- 22. Each new version of the ANSYS Software is substantially similar to the preceding version, and in most cases, to other earlier versions of the ANSYS Software.
- 23. Plaintiff licenses the ANSYS Software to its customers. Customers may purchase single user licenses or multi-user licenses. In either case, the number of simultaneous users or end-users may not exceed the number of licenses purchased. Plaintiff prevents unauthorized access of the ANSYS Software through the use of a Security Mechanism. Plaintiff's license agreement states that customers are not allowed to use the ANSYS Software without the Security Mechanism, and that the ANSYS Software can detect the installation or use of illegal copies of the ANSYS Software and collect and transmit data about those illegal copies.
- 24. Piracy of software occurs when users access software for which they have not purchased a valid license. The ease of digital replication of software lends itself to illegal copying of software, where users may make multiple copies of a software program, and then distribute the copies to users who have not made a legal purchase of the software (i.e., either distributing the software for free, or selling the copies of the software at deeply discounted prices). The licensing associated with the ANSYS Software limits how many licensed versions of the ANSYS Software can be used at once, but Plaintiff allows those licensed organizations to install the ANSYS Software on an unlimited number of computers.

- 25. In an effort to reduce the use of illegally copied software, software providers implement license verification technology where the software will not function unless a license has been legally purchased. The license verification technology may be a software mechanism or a physical mechanism to be attached to a single computer. The license verification technology may be in the form of a key (i.e., a series of numbers and letters) that a user types in during the software installation process, or a hardware device, where the software will only operate correctly when the hardware device is attached to the computer executing the software. The license verification technology is provided by the software provider to the buyer when the software is purchased legally. Users who have not made a legitimate purchase of the software will not have access to the key or hardware device provided by the software provider, and therefore the software will not function properly. Plaintiff provides license verification technology as a component of the above-mentioned Security Mechanism.
- 26. Software hackers reverse engineer the security mechanism and then provide processes and utilities to bypass the license enforcement in order to allow unauthorized use of the software. These processes and utilities mimic the license verification technology (i.e., keys, hardware devices, etc.) as a means to allow pirated software to function fully as legally purchased software. Software utilities that mimic the license verification technology are often referred to as "cracked" licenses. Software hackers may also create hacked versions of the software such that a license is not needed during installation.
- 27. Sophisticated websites exist where illegally obtained software, the software utilities that mimic the license verification technology, and hacked versions of the software may be downloaded and installed by those who do not want to pay for properly licensed software.

 Each hacked version of the software represents a lost sale and/or license for the company that

owns the software, and for resellers of the software (who may provide hardware installation and support, and software configuration, customization, and maintenance). A study by the Business Software Alliance reported that properly licensed software has a positive impact on national economic activity that is more than three times the impact of pirated software.¹

- 28. Software that has been hacked or modified to use a cracked license may also contain malware that can damage computer systems, and/or infiltrate the computer network and the data on that network. In a report commissioned by the Business Software Alliance, the higher the pirated software rate in a country, the more malware generally encountered on computers in that country.² Software that has been hacked may also not operate properly, negatively impacting the reputation of the software company that now has no oversight or control over the quality of the hacked versions of its software in use, and/or the products produced by that software.
- 29. Piracy Detection and Reporting Security Software (PDRSS) exists to identify instances of pirated software in use and provides the identity and location of organizations utilizing the pirated software to the software providers. Identification of pirated software allows the software providers to take legal action against intentional software piracy, notify unwitting organizations of the illegal use of the software (and the potential malware problems that can accompany pirated software), and sell valid software licenses in the place of the previously illegally obtained software programs to recoup lost sales. Plaintiff identifies instances of pirated

¹ https://gss.bsa.org/wp-content/uploads/2018/05/2018_BSA_GSS_Report_en.pdf

² https://www.bsa.org/news-events/news/report-finds-unlicensed-software-and-malware-are-tightly-linked-1

software in use through PDRSS which, along with the license verification technology, is a component of the Security Mechanism.

- 30. PDRSS providers also identify the means by which software hackers have thwarted the license verification technology (i.e., the aforementioned cracked license) for a particular software program. For example, PDRSS providers may accomplish this by downloading pirated software from the above-mentioned websites and determining how the software hackers were able to bypass the license verification technology. Once the software hackers' methods are identified, the PDRSS providers then work with software providers, such as Plaintiff to map out a plan for determining when pirated software is in use. This includes identifying when the pirated software is using a cracked license.
- 31. The plan may include a variety of forms for identifying software piracy. The plan may also include defining software use patterns that are indicative of software piracy. PDRSS providers work with software providers to determine various patterns that are indicative of pirated software use, and thresholds at which the PDRSS software should begin to gather and report data on the computer using the pirated software. For example, it is common for a potential customer to test out a software program for a short period of time before deciding to purchase the software package legally. However, an organization that continues to use illegally downloaded software for an extended period (i.e., beyond a reasonable test period as defined by the software provider) has breached the threshold of a trial period. Another threshold might be the detection of a cracked license which is an indication of an anomaly within the software, or other suspicious patterns of use of the software.
- 32. Software providers, such as Plaintiff, embed the PDRSS (according to the plan tailored specifically for that software provider) within their software, validate that the patterns

and thresholds will trigger on pirated software (and will not trigger on validly purchased software), and then release the software. The software that contains the embedded PDRSS also provides a clear notice within the Software License Agreement ("SLA") of the existence of the PDRSS within the software. Once new versions of software are released, both legally purchased software and the eventually pirated software will contain the embedded PDRSS that triggers data reporting when suspicious patterns and thresholds are detected.

- 33. Cracked versions of the ANSYS Software downloaded from a pirate website still contain a click-through version of the SLA that the user of the pirated ANSYS software must agree to before gaining access to the software program.
- 34. The serial number of the license is a unique identifier and helps in identifying unauthorized versions of the software. Multiple versions of software using the same serial number are indicative of unauthorized versions of software using a cracked license. In some cases, illegal license generators create license files having serial numbers that are inconsistent with the serial numbers generated by the software providers, which is also indicative of a cracked license.
- 35. The IP address is a unique address used to identify computers on the global network of the internet. An IP address is the numerical sequence by which a computer on the public internet can identify another computer on the public internet. IP addresses are in the form xxx.xxx.xxx.xxx where each xxx must be a number between 0-255.
- 36. The identifying name of a computer is typically a name an organization gives to each computer in the organization for easy identification within the organization. For example, identifying computer names Computer Lab 1 and Computer Lab 2 are easy to remember, and

help employees within the organization easily reference particular computers, rather than, for example, referring to computers by a serial number associated with the computer hardware.

- 37. A Media Access Control ("MAC") address is a unique hardware identifier assigned to network interfaces. Every device that makes a physical connection to the network, whether it is an Ethernet card or port or wireless connection has a unique and specific address. Thus, a computer with both an Ethernet connection and a wireless connection has two unique MAC addresses. A MAC address is a series of numbers and letters. When a network device is manufactured, it is assigned a MAC address at the factory. The first six digits of a MAC address represent the device manufacturer, which can be looked up on the Internet.
- Reporting data from the embedded PDRSS includes a variety of information to identify the software that has been pirated and the organizations utilizing the pirated software, such as the version of the software being used, the license serial number, the Internet Protocol (IP) address of the organization where the pirated software is running, the identifying name of the computer, and a MAC address. Through the Security Mechanism, Plaintiff collects the aforementioned identifying information to determine when pirated and unlicensed versions of its ANSYS Software are being utilized.
- 39. Software providers may track their own reporting data or may use third party providers to track the reporting data. Once pirated copies of software are identified, software providers can notify the organizations using the software, and request that they purchase valid licensed copies of the software instead of using the pirated software.
- 40. Through the use of PDRSS, Plaintiff has identified Defendants as using unlicensed and pirated ANSYS Software.

- 41. SERES is a Delaware corporation, and according to its website, is a global transportation technology company focused on developing intelligent electric vehicles.
- 42. Plaintiff has detected at least one hundred twenty-four (124) instances of unauthorized access of the ANSYS Software by Defendants through the use of PDRSS. The PDRSS reported two (2) computers located at SERES running at least two (2) unauthorized seats of the ANSYS Mechanical software, and one (1) seat of the ANSYS Fluent software between June 10, 2017 through July 26, 2019.
- 43. Each seat of pirated software included an ANSYS High Performance Computing Capabilities ("HPC") license that enhances the processing capabilities of the software.
- 44. On August 14, 2019, ANSYS sent letters to Mr. Xiaobo Li, IT Director at SERES, and Mr. Shen Chen, IT Manager at SERES, to discuss the infringement of the ANSYS Software, and to discuss a resolution for the unlicensed, pirated use of the software.
- 45. On or about August 22, 2019, a call was held between ANSYS and Mr. Li, Mr. Chen and Mr. Jacob Swiss, Corporate Counsel for SERES.
- 46. However, the call did not result in any resolution concerning the unlicensed, pirated use of the ANSYS Software.
- 47. Thereafter, ANSYS sent two letters to Mr. Taylor, on November 5, 2019 and November 20, 2019, in an attempt to further resolution, and to state that legal action would be necessary if SERES continued to ignore ANSYS.
- 48. Neither Mr. Taylor nor anyone else from SERES ever responded to address ANSYS's concerns.

- 49. On December 18, 2019, McInnes & McLane, LLP sent a letter to Mr. Taylor through the United States Post Office, and via email in an attempt to discuss a resolution for the unlicensed, pirated use of the ANSYS Software.
- 50. United States Post Office tracking indicates the letter was delivered to the reception desk at SERES on December 23, 2019, and all indications are that SERES received the email.
- 51. Once again, no one from SERES responded to the outreach from McInnes & McLane.
- 52. As a former validly licensed customer of ANSYS, SERES has had a need for, utilized and has knowledge of the value of the ANSYS Software.
- 53. Upon information and belief, Defendants continue to infringe upon Plaintiff's Copyrights by using unlicensed, pirated versions of the ANSYS Software.
- 54. As a direct and proximate result of Defendants' acts of infringement, the Plaintiff has suffered damages and will continue to suffer damages.
- 55. As a direct and proximate result of Defendants' acts of infringement, the Plaintiff has suffered and continues to suffer irreparable harm for which there is no adequate remedy at law.

COUNT ONE

Infringement of ANSYS Software Registration Number TX 8-268-167 ("ANSYS 167") by Defendants, 17 U.S.C. §§ 106 and 501

- 56. The Plaintiff incorporates the previous paragraphs of this Complaint by reference and re-alleges them as originally and fully set forth herein.
- 57. Defendants have knowingly and intentionally infringed, and continue to infringe ANSYS 167, and will continue to do so unless enjoined by this Court.

- 58. As a direct and proximate consequence of Defendants' infringing acts, the Plaintiff has suffered and will continue to suffer injury and damages, and unless such acts and practices are enjoined by the Court, will continue to be injured in its business and property rights, and will suffer and continue to suffer injury and damages, which are causing irreparable harm and for which Plaintiff is entitled to relief.
- 59. Upon information and belief, the aforementioned infringement is knowing, intentional and willful.

COUNT TWO

Infringement of ANSYS Software Registration Number TX 8-268-160 ("ANSYS 160") by Defendants, 17 U.S.C. §§ 106 and 501

- 60. The Plaintiff incorporates the previous paragraphs of this Complaint by reference and re-alleges them as originally and fully set forth herein.
- 61. Defendants have knowingly and intentionally infringed, and continue to infringe ANSYS 160 and will continue to do so unless enjoined by this Court.
- 62. As a direct and proximate consequence of Defendants' infringing acts, the Plaintiff has suffered and will continue to suffer injury and damages, and unless such acts and practices are enjoined by the Court, will continue to be injured in its business and property rights, and will suffer and continue to suffer injury and damages, which are causing irreparable harm and for which Plaintiff is entitled to relief.
- 63. Upon information and belief, the aforementioned infringement is knowing, intentional and willful.

COUNT THREE

Infringement of ANSYS Software Registration Number TX 8-714-692 ("ANSYS 692") by Defendants, 17 U.S.C. §§ 106 and 501

- 64. The Plaintiff incorporates the previous paragraphs of this Complaint by reference and re-alleges them as originally and fully set forth herein.
- 65. Defendants have knowingly and intentionally infringed, and continue to infringe ANSYS 692, and will continue to do so unless enjoined by this Court.
- 66. As a direct and proximate consequence of Defendants' infringing acts, the Plaintiff has suffered and will continue to suffer injury and damages, and unless such acts and practices are enjoined by the Court, will continue to be injured in its business and property rights, and will suffer and continue to suffer injury and damages, which are causing irreparable harm and for which Plaintiff is entitled to relief.
- 67. Upon information and belief, the aforementioned infringement is knowing, intentional and willful.

COUNT FOUR

Infringement of ANSYS Software Registration Number TX 8-780-315, ("ANSYS 315") by Defendants, 17 U.S.C. §§ 106 and 501

- 68. The Plaintiff incorporates the previous paragraphs of this Complaint by reference and re-alleges them as originally and fully set forth herein.
- 69. Defendants have knowingly and intentionally infringed, and continue to infringe ANSYS 315, and will continue to do so unless enjoined by this Court.
- 70. As a direct and proximate consequence of Defendants' infringing acts, the Plaintiff has suffered and will continue to suffer injury and damages, and unless such acts and practices are enjoined by the Court, will continue to be injured in its business and property rights,

and will suffer and continue to suffer injury and damages, which are causing irreparable harm and for which Plaintiff is entitled to relief.

71. Upon information and belief, the aforementioned infringement is knowing, intentional and willful.

COUNT FIVE

Breach of Contract

- 72. The Plaintiff incorporates the previous paragraphs of this Complaint by reference and re-alleges them as originally and fully set forth herein.
- 73. Plaintiff and Defendants entered into an SLA wherein Defendants expressly and impliedly agreed to the term and conditions set forth in the SLA.
- 74. Defendants breached the SLA by illegally downloading and using pirated versions of the ANSYS Software without proper authorization or payment to ANSYS as required by the SLA.
- 75. As a direct and proximate result of Defendant's breach of the SLA, Plaintiff has sustained damages.

WHEREFORE, Plaintiff, ANSYS, Inc., respectfully requests that this Court enter judgment in its favor and against Defendants and requests relief as follows:

- A. Judgment be entered in its favor and against Defendants on each count of the Complaint;
 - B. Declaring that Defendants have infringed the ANSYS Software;
 - C. Declaring that the foregoing infringement was willful and knowing;

- D. Entry of a preliminary and thereafter permanent injunction prohibiting the Defendants, and their agents, servants and employees, and all persons acting in concert with, or for them from continuing to reproduce, distribute, display, disseminate, transmit, make available for download or otherwise use the ANSYS Software in any manner whatsoever appropriating or in violation of the Plaintiff's Copyrights;
- E. Award Plaintiff its actual damages and Defendants' additional profits in an amount to be determined at trial;
 - F. Award Plaintiff prejudgment interest;
 - G. Award Plaintiff its costs, attorney's fees and expenses arising from this suit; and
 - H. Grant Plaintiff such other relief as this Court deems just and proper.

JURY DEMAND

Plaintiff demands a trial by jury on all counts of its Complaint so triable.

Dated: March₁₁, 2020 By: /s/ A. Patricia Diulus-Myers, Esq.

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